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**DEFENSE INTELLIGENCE REPORT**

**SOVIET FRONTAL AVIATION  
SUPPORT TO GROUND FORCES  
OPERATIONS**

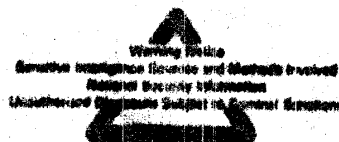
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SOVIET FRONTAL AVIATION SUPPORT TO GROUND  
FORCES OPERATIONS

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DDI-1300-94-77-SI

Information Cutoff Date: 1 July 1977

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Author:   
Air Forces Branch, Frontal Aviation/Warsaw Pact Section

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PREFACE

The purpose of this report is to assess the availability and employment of Soviet Frontal Aviation assets in direct support of ground forces in a conventional conflict between the Warsaw Pact and NATO in Central Europe. This report examines the employment, allocation, and capability of air assets to support ground attack operations.

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Addressees are requested to forward information which will supplement or correct this report. Questions and comments should be referred in writing to the Defense Intelligence Agency (ATTN: DB-1D2), Washington, D.C. 20301.

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SUMMARY

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Since World War II Soviet military doctrine has stressed coordinated action by combining arms and fire-power in a front. The mission of Frontal Aviation (FA) is to provide direct support to the front, under the control of the front commander.

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As the emphasis of Soviet doctrine has changed over the years, the composition and capabilities of the FA force have similarly changed. Since 1964, the Soviets have concentrated on gaining flexibility in responding to various situations.

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The current FA active force opposing NATO's Central Region capable of ground attack consists of some 2,410 combat attack aircraft (790 fighter-bombers, 70 tactical bombers, 970 counterair fighters, and 580 assault helicopters). In recent years increasingly capable combat aircraft equipped with new weapons systems have entered service; included among these are armed assault helicopters. These advances have resulted in a ground attack force well qualified to conduct ground support operations.

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In a conventional operation against NATO, about 80 percent of the FA fixed-wing assets would be devoted initially to strikes on targets, such as airfields, SAMs, and nuclear weapons facilities, and to nuclear withhold needs. The remaining fixed-wing assets and all the assault helicopters would fall under the direct control of the front commander. These aircraft would be employed in interdiction and close air support roles, with helicopters increasingly dominating the latter category. After completing the initial strikes, additional aircraft would become available to the front commander.

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As a new generation of aircraft and new weapons with increased accuracy and punch have been introduced, the Frontal Aviation ground attack force has enhanced its capability to conduct ground support operations.

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**SOVIET FRONTAL AVIATION SUPPORT TO GROUND  
FORCES OPERATIONS** [REDACTED]

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**1. INTRODUCTION**

[REDACTED] The basic organizational structure, missions, doctrine, and policy of Soviet Frontal Aviation (FA) today evolved from, and continue generally to reflect, Soviet thinking that dates from the closing phases of World War II. In 1942 tactical air units were organized into air armies assigned to specific front commands. Soviet doctrine has consistently stressed coordinated action by combined arms in a front, with overall command vested in the front commander. The mission of Frontal Aviation is to provide direct support to the front, with individual units being precommitted to a specific geographic front.

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**2. HISTORICAL PERSPECTIVE**

[REDACTED] During the 12-year period 1943 to 1955, Soviet Frontal Aviation, acting in support of the Red Army, provided direct air support to ground units. A primary tasking was maintaining air superiority over the battle area and serving as an "aerial extension of artillery" when required. It was during this period that Frontal Aviation entered the jet age. By the late 1950's, however, it was apparent that Frontal Aviation aircraft designs, especially those used for ground attack, had provided only a marginal capability to perform the assigned roles.

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[REDACTED] Early versions of the MiG-21/FISHBED were designed as point defense interceptors and had only a minimal all-weather capability. The Su-7/FITTER A became the primary fighter-bomber and the initial single-seat aircraft believed capable of tactical nuclear weapons delivery. The only other tactical aircraft capable of nuclear delivery, the Il-28/BEAGLE tactical bomber, was in the subsonic performance class. Only visual and a minimal photo capability existed in tactical reconnaissance elements supporting Frontal Aviation.

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[REDACTED] Soviet doctrine increasingly emphasized all-out nuclear war during the period 1955 - 1965. As a result, Frontal Aviation was reorganized, and by 1960 the force consisted of some 6,700 aircraft, of which more than one-third were light bombers for nuclear weapons delivery. This period saw the introduction of supersonic second-generation aircraft into the Frontal Aviation inventory. All-weather

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fighter-interceptors and supersonic tactical bombers represented a general improvement in the potential of Frontal Aviation, but serious deficiencies were present. Nuclear weapons delivery was the priority tasking, but the tactical bombers and fighter-bombers were limited by short range, low payloads, and marginal avionics.

[redacted] Following the ouster of Khrushchev in 1964, the need for a flexible force emerged, and the upgrading of Frontal Aviation was undertaken. It was recognized that new aircraft with longer ranges, sophisticated avionics, and larger payload abilities were required to make this flexibility possible. Instead of trying to upgrade old airframes, the Soviets embarked on a program to produce new designs not only in aircraft but weapon systems as well. In 1969 the introduction of third-generation designs began, marking an across-the-board upgrading of Frontal Aviation capabilities. These new aircraft are well equipped to function in today's battle environment. At present, 52 percent of the entire Frontal Aviation ground attack force is composed of these new designs. The rest of the force is still composed of first- and second-generation aircraft -- mainly FITTER A and B and early model FISHBED and a few MiG-17/FRESCO. Soviet air forces facing NATO's Central Region, including the three western military districts, consist of 72 percent new design aircraft.

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### 3. FORCE AVAILABILITY

[redacted] Today's Frontal Aviation force has a sufficient number of aircraft opposing NATO's Central Region to conduct a large variety of missions. Of the 2,410 attack aircraft in the force, there are 790 ground support combat aircraft in 19 regiments and about 580 assault helicopters. Additionally, there are some 70 tactical bombers (Yak-28/BREWER) remaining in the operational inventory. Lastly, there are almost 970 fighter aircraft in 22 regiments whose primary role is counterair operations. Many of these aircraft have a secondary mission of ground support, mostly interdiction. They are optimized for counterair operations, which entails attacking air assets on the ground, as well as in the air, and air-related facilities.

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[redacted] The other Warsaw Pact countries in the NATO Guidelines Area (GDR, Poland, Czechoslovakia) have over 450 ground attack and 250 counterair aircraft as well as some armed assault helicopters available to conduct ground support operations.

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#### 4. FORCE CAPABILITY

[ ] Force size does not necessarily equate to ability, and the Soviets, being well aware of this and of the combat environment in which the force will be operating, have made significant improvements in force quality since 1969. In addition to the improved FISHBED, there is only one new design, MiG-23/FLOGGER B, for the counterair mission and three new fighter-bomber designs: MiG-27/FLOGGER D, Su-17/FITTER C/D, and Su-19/FENCER. In every case the new fighter-bomber aircraft are quantum advances over their predecessors; some have up to four times the range and payload of earlier aircraft. The most significant new avionics include a laser range finder, a laser target designator, a Doppler navigation system, a head-up display, a radar warning receiver, and a tactical computer for precise weapons release data during visual deliveries.

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[ ] New weapon systems associated with these aircraft include several different types of rocket pods and machine-guns, including Gatling guns; bombs with varying delivery characteristics; and a new family of air-to-surface missiles (ASMs) having electromagnetic, electro-optic, and command guidance systems. In addition, the ability of the aircraft to carry a variety of weapons has been enhanced through the increase in the number of weapon stations and the use of universal ordnance pylons and multiple ejection racks.

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[ ] While upgrading of the fixed-wing force has been in progress, another dimension of direct air support is being introduced -- the increased use of armed helicopters. This is most vividly seen in the development of the Mi-24/HIND series of assault helicopters. The latest version -- the HIND D -- is the largest and most potent of its kind in the world today. It is equipped with a variety of weapon systems such as rockets, Gatling guns, antitank missiles, bombs, and possibly electro-optic ASMs; it is assessed to have avionics equipment, such as low-light television and laser range finders and target designators, and a fire control computer. With this advanced equipment the HIND is exceptionally suitable for providing air support to troops in

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[ ] The emphasis the Soviets have placed on assault helicopter development, deployment, and operations in both training and exercises demonstrates their willingness and ability to use the helicopter in the air support role, and in the close air support role, in particular. The HIND, and even some Mi-8/HIP and Mi-4/BOOND, have been armed to conduct fire support operations very close to the troops in combat. This results in a very versatile and reliable attack force.

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[ ] It is evident from the foregoing that Frontal Aviation has a large number of air assets with the ability to deliver large quantities of munitions with acceptable accuracy on a wide variety of targets.

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#### 5. FORCE EMPLOYMENT

[ ] Soviet Frontal Aviation combat assets are assigned by the General Staff to air operations or front support. Their employment in the ground attack role, no matter where they are assigned, falls into these categories: close air support, interdiction, and reconnaissance. All of these categories may be grouped under the heading of "direct support" when they are done under the command of the front commander.

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[ ] Air assets initially allocated to carrying out the conventional air operation in central Europe, which is controlled by the Soviet Air Force Headquarters under the direction of the General Staff, are designed to achieve air superiority and the degradation of NATO's theater nuclear forces. They consist of, at most, 80 percent of FA's fixed-wing assets. This would include about 1,320 fixed-wing aircraft (assuming 90% of the force is ready for combat) which comprise 18 counterair regiments, 14 fighter-bomber regiments, and 2 tactical bomber regiments. FA aircraft dedicated initially to the execution of the air operation would be selectively employed against NATO airbases, nuclear-capable missile and rocket forces, and command and control facilities. Supporting operations would be designed to suppress air defenses. Upon the conclusion of the air operation, air assets will be released to front commanders. The size of the allocation will be dependent on the size of the residual force, nuclear withhold needs, and further requirements of the General Staff. (See Appendix A.)

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[REDACTED] The front commander will be allocated initially at least 20 percent of the fixed-wing aircraft (four counterair regiments and five fighter-bomber regiments) and all of the assault helicopters. These assets will be used primarily in the interdiction and close air support roles, since ground forces' air defense systems constitute the primary counter-air force. Some counterair aircraft will function in their primary air-to-air role. In interdiction, new weapon systems and aircraft abilities have increased significantly the probability of target destruction. When involved in close air support of troops in combat, these same aircraft can quickly provide firepower with increased accuracy. (See Appendix A.)

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[REDACTED] Even with this support, it is the armed assault helicopter, particularly the HIND, that is becoming an important element in close air support operations. With its ability to operate within a AAA and/or SAM air defense environment, attack at very low level, and carry a great variety of weapons, the HIND's usefulness against tanks and troops is considered high.

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[REDACTED] The precision and high probability of destruction associated with the latest designs now entering the force will give the ground commander a relatively high level of confidence that his requirements will be filled.

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[REDACTED] In the final analysis, Soviet ground attack air assets are employed to augment, replace, or extend the ground force organic firepower. The objective is to deliver firepower when and where the ground commander desires, sustaining the tempo and momentum of the ground force advance.

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#### 6. CONCLUSIONS

[REDACTED] The Soviets have the means, in terms of aircraft capabilities, numbers of fixed- and rotary-wing aircraft, and command, control, and communications systems, to conduct direct air support for the ground forces. Their commitment to this concept is evidenced by exercises and training in such activities. Initial allocation of resources to the front commander will be relatively small (excluding the assault helicopters), but as the conflict progresses the allocation will grow. Frontal Aviation has the flexibility to provide timely and accurate firepower in proximity to troops in combat as well as against interdiction targets. Assault helicopters have added a new dimension in direct support, giving the ground commander additional firepower. Overall, Frontal Aviation assets can provide the direct support required by the front commander in both quantity and quality.

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### APPENDIX A

#### Numeric Breakdown of Aircraft Allocations

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Data below represents an analytic judgment on numbers of Soviet Frontal Aviation aircraft allocated in central Europe. Data cutoff date is 1 July 1977.

#### Current Frontal Aviation Active Force Capable of Ground Attack Opposing NATO's Central Region:

Fighter-bombers	790
Counterair fighters	970
Tactical bombers	70
Total fixed-wing aircraft	1,830
 Assault helicopters	 580
 Grand total	 2,410 aircraft

#### Air Operation

80% of fixed-wing aircraft = 1,465 aircraft  
(18 counterair regiments, 14 fighter-bomber regiments, and 2 tactical bomber regiments)

90% Ready for Combat = 1,320 aircraft

#### Front Operations

20% of fixed-wing aircraft = 365 aircraft  
(4 counterair regiments and 5 fighter-bomber regiments)

and 100% of rotary-wing aircraft (assault helicopters) =  
580 helicopters

90% Ready for Combat = 330 fixed-wing aircraft  
522 helicopters  
852 total

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 B055 DIA/DT-4B  
 B060 DIA/RDS-3A5 (3)  
 B080 DIA/SMS  
 B132 DIA/DE-1  
 B134 DIA/DE-2  
 B155 DIA/RDS-3A4  
 B167 DIA/DT-2B  
 B229 DIA/RDS-3A1AB  
 B353 DIA/RDS-3A1B (50)  
 B364 DIA/DB-1B3  
 B485 DIA/IS  
 B573 DIA/DB-4E1  
 B579 DIA/DN-2B2  
 B583 DIA/DB-1D  
 B722 DIA/DB-5B  
 B731 DIA/DB-5F  
 B738 DIA/RDS-3A1AA  
 B741 DIA/RDS-2A  
 B784 DIA/DB-1D2 (10)  
 B267 DIA/DP-3

U.S. ARMY

C202 III CORPS  
 C204 TCATA  
 C305 XVIII ABN CORPS  
 C309 DET N 500TH MIG  
 C428 OP TEST&EVAL AGCY  
 C454 FLD ARTY SCH  
 C459 COMD-BEN STAFF COL  
 C463 USA INTEL CEN&SCH

U.S. ARMY (Continued)

C470 ARMY WAR COLLEGE  
 C500 HQ TRADOC  
 C538 WHITE SANDS MSL RG  
 C539 TRASANA  
 C545 ARRCOM  
 C550 ELECTRONICS CMD  
 C557 USAIIC-SPAD  
 C591 FSTC  
 C619 MISSILE INTEL AGCY  
 C620 USASRD MARYLAND  
 C641 AVIATION SCH  
 C646 HQ COMB ARMS CEN  
 C737 USA TEST&EVAL CMD  
 C768 ITAD (ACSI)  
 C800 SSO ACSI DA WASH (3)  
 C815 USA AIR DEF CTR

U.S. NAVY

D008 NISC (2)  
 D217 NAVMPCEN  
 D218 NRL WASH DC  
 D246 NAVSURFMPNCEN DAHL  
 D247 NAVSURFMPNCEN WOAK  
 D249 NAVPGSCOL  
 D506 NUC  
 D510 CHNAVMAAT  
 D700 CGMCDCEC  
 D900 NFOIO  
 D982 SSO COMNAVINTCOM (2)

U.S. AIR FORCE

E010 AFIS/INDOC-HQUSAF  
 E020 AFIS/INZA-HQUSAF  
 E053 AF/INAKA-HQUSAF  
 E054 AF/INAKB-HQUSAF  
 E100 TAC (INSA) (10)  
 E200 AAC  
 E293 AF/XOFA-HQUSAF (2)  
 E303 AF/INAP-HQUSAF  
 E408 AFWL/IN  
 E411 FTD/ETID (ASD)

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U.S. AIR FORCE (Continued)

E420 FTD/NICD (2)  
 E429 SANSO/IND  
 E437 AFIS/INI  
 E450 AJ/IN

U S S COMMANDS

F005 CINCPAC  
 G005 CINCPAC/NORAD  
 H005 USCINCEUR  
 H006 USEUCOM DEFAMALCTR  
 H100 USAF  
 H101 497RTG (USAF 1RC) (10)  
 H306 DCSI US COM BERLIN  
 H500 CINCUSNAVEUR  
 H511 COMSIXTHFLT  
 H525 VII CORPS  
 H530 1ST ARM DIV  
 J005 CINCLANT  
 J515 FICEUPLANT  
 J650 AIRTEVRON ONE  
 K106 PACAF (10)  
 K315 IPAC (CODE I-24)  
 K650 COMNAVJURFPAC  
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*a. Microfiche*  
*b. N10/455R*

**DEFENSE INTELLIGENCE REPORT**

**MODERNIZATION OF SOVIET  
FRONTAL AVIATION FORCES  
IN THE FORWARD AREA, 1970-  
1977**

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**AUGUST 1977**

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**MODERNIZATION OF SOVIET FRONTAL AVIATION FORCES  
IN THE FORWARD AREA, 1970-1977**

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DDI-1300-99-77

Information Cutoff Date: 15 June 1977

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PREFACE

[ ] This report focuses on the upgrading of Soviet Frontal Aviation counterair, ground attack, and reconnaissance units located in Eastern Europe. It also describes the capabilities of this force and the extent to which the modernization program has increased the threat to NATO's Central Region.

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[ ] Supplementary information on contemporary air order of battle can be found in DIA Air Order of Battle, Volume I - U.S.S.R. and Eastern Europe [ ] DDI-1300-101-series, [ ] Detailed information on Soviet aircraft capabilities is available in DIA Aircraft Handbook (Characteristics and Performance), Eurasian Communist Countries [ ] DST-1300-H-series, [ ] Recent developments in the entire Soviet Frontal Aviation forces are discussed in Defense Intelligence Report, Soviet Frontal Aviation: 1975 in Review [ ] DDI-1300-92-77-SI, [ ]

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SUMMARY

[ ] The Soviet Union has an available force of 2,300 fighters and fighter-bombers in the Forward Area and the three western military districts of the USSR. Almost 1,400 of these are based in the German Democratic Republic, Poland, Czechoslovakia, and Hungary. These aircraft can be divided into three categories according to primary role: counterair, ground attack, and reconnaissance.

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[ ] Since 1970, Soviet forces in Eastern Europe have been undergoing an upgrading program, which has been accelerated since 1973. The counterair force, which is the largest of the three categories, has been completely reequipped with third-generation MiG-21/FISHBED J/K/L and MiG-23/FLOGGER B aircraft. The ground attack force has been almost entirely modernized, primarily with Su-17/FITTER C/D and MiG-27/FLOGGER D aircraft. The reconnaissance force, which is the smallest element, has lagged behind in modernization, but some new MiG-25/FOXBAT have been introduced.

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[ ] These new aircraft, with their increased range and payload capabilities and their new equipment, have increased significantly the combat potential of the Soviet tactical air forces opposite NATO's Central Region.

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MODERNIZATION OF SOVIET FRONTAL AVIATION FORCES  
IN THE FORWARD AREA, 1970-1977 [ ]

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1. INTRODUCTION

[ ] All Soviet Air Force (SAF) combat air assets in the Forward Area are allocated to the Soviet Frontal Aviation tactical air armies in the German Democratic Republic (GDR), Poland, Czechoslovakia, and Hungary. The fighter and light bomber regiments assigned to these air armies can be divided into three categories according to primary role: counterair, ground attack, and reconnaissance.

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[ ] SAF GDR, the largest of these air armies, has 405 counterair fighters in nine regiments, 260 ground attack fighter-bombers in six regiments, and 83 reconnaissance aircraft in three units -- a total of nearly 750 aircraft. SAF Poland consists of three counterair regiments totaling 135 aircraft, three ground attack regiments with 126 aircraft, and one reconnaissance regiment with 40 aircraft -- a total of more than 300 aircraft. SAF Czechoslovakia, the smallest of the Forward Area air armies, has only 106 combat fighter aircraft -- 90 in two counter-air regiments and 16 in one reconnaissance unit. SAF Hungary has 135 aircraft in three counterair regiments (including one regiment of 32 light bombers), 74 aircraft in a ground attack role, and 24 with reconnaissance responsibilities, for a total of 233 aircraft. Most regiments in all four air armies also have a few training aircraft assigned. (See Figure 1.)

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[ ] The Soviets initiated an upgrading program for these forces in 1970 when the much-improved MiG-21/FISHBED J began replacing "D" and "F" variants of FISHBED as well as first-generation MiG-17/FRESCO and MiG-19/FARMER aircraft. Since 1973 the force has been upgraded at an accelerated rate, with most activity involving the introduction of variable-geometry-wing aircraft. Primary among these are FISHBED J/K/L and MiG-23/FLOGGER B counterair aircraft and MiG-27/FLOGGER D and Su-17/FITTER C/D/E ground attack models.

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Figure 1. Soviet Fighter and Light Bomber Assets in the Forward Area

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2. UNIT UPGRADINGa. Counterair Regiments

Since 1970 each of the 17 counterair regiments in the Forward Area, which had previously been equipped primarily with FISHBED D/F, have been fully reequipped with more modern aircraft. All counterair regiments are currently equipped with either FISHBED J/K/L (Figure 2) or FLOGGER B fighters. Each of the four air armies has at least one regiment of each among its counterair assets. Some regiments which had been upgraded from FISHBED D/F to FISHBED J or K prior to 1973 have since been further upgraded to FLOGGER B. Each counterair regiment also has a few operational training aircraft -- either FLOGGER C or U-MIG-21/MONGOL. The upgrading of the counterair force is displayed in Appendix A.

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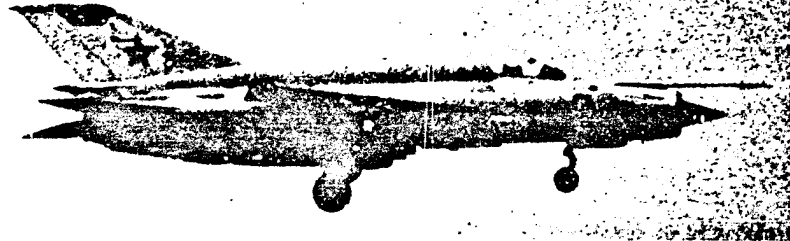


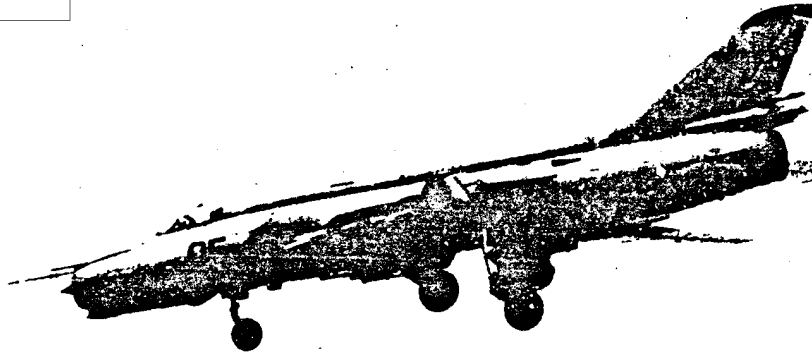
Figure 2. FISHBED J/K/L (U)

b. Ground Attack Regiments

Eleven ground attack regiments are located in the Forward Area -- six in the GDR, three in Poland, and two in Hungary. There are no ground attack fighter or light bomber assets in SAF Czechoslovakia. In 1970 most of these regiments were equipped with FRESCO and FITTER A. All have now been reequipped, and eight have received modern third-generation fighter aircraft. Most of these now have FITTER C/D (Figure 3) or FLOGGER D (Figure 4), but a single regiment in the GDR has FISHBED J/K/L. The entire ground attack modernization program has occurred since 1973. Even those two fighter regiments which retain older aircraft models have been reequipped with different, albeit obsolescent, aircraft. A single light bomber regiment in Hungary also has a ground attack mission. Each ground attack regiment has operational training aircraft assigned -- MONGOL, FLOGGER C, U-Su-7/MOUJIK, or U-Yak-28/MAESTRO. The progress of the reequipment program for ground attack regiments is depicted in Appendix B.

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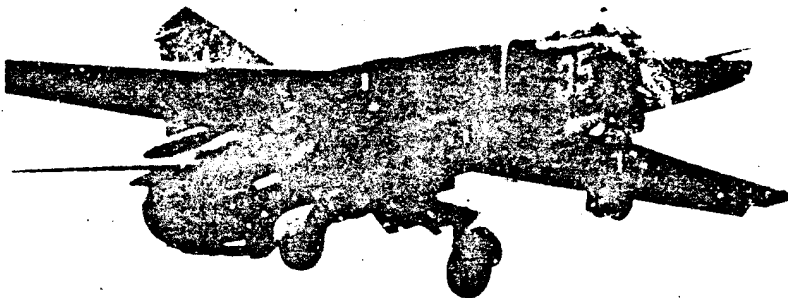


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Figure 3. FITTER C/D.



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Figure 4 FLOGGER D.



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## APPENDIX A

Counterair Force Upgrading 

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<u>AIRFIELD</u>	<u>MID-1970</u>	<u>MID-1973</u>	<u>MID-1977</u>
<u>SAF CDR</u>			
Falkenberg	37 FISHBED D/F	45 FISHBED D/F 6 MONGOL	45 FLOGGER B 5 FLOGGER C
Altenburg	37 FISHBED D/F	45 FISHBED K 4 MONGOL	45 FISHBED J/K/L 4 MONGOL B
Merseburg	37 FISHBED D/F	45 FISHBED K 8 MONGOL	45 FLOGGER B 5 FLOGGER C
Zerbst	23 FIREBAR A/B 12 FARMER B/E	4 FIREBAR A 22 FIREBAR B 13 FISHBED K	45 FLOGGER B 7 FLOGGER C
Juterbog	37 FISHBED D/F	45 FISHBED D/F 3 MONGOL	45 FISHBED J/K/L 6 MONGOL B
Kothen	37 FISHBED J	45 FISHBED J 5 MONGOL	45 FISHBED J/K/L 4 MONGOL B
Wittstock	37 FISHBED D/F	45 FISHBED K 10 MONGOL	45 FISHBED J/K/L 8 MONGOL B
Finow	42 BEACLE	45 FISHBED J	45 FLOGGER B 4 FLOGGER C
Damgarten	37 FISHBED D/F	10 FISHBED K 35 FISHBED D/F	45 FISHBED J/K/L 7 MONGOL B
<u>SAF POLAND</u>			
Stargard	37 FISHBED D/F	42 FISHBED J 2 MONGOL	45 FISHBED J/K/L 4 MONGOL B
Chojna	37 FISHBED D/F	45 FISHBED K 2 MONGOL	45 FISHBED J/K/L 4 MONGOL B
Koziobrzeg	37 FISHBED D/F	40 FISHBED K	45 FLOGGER B 4 FLOGGER C
<u>SAF CZECHOSLOVAKIA</u>			
Mimon	37 FISHBED D/F	40 FISHBED D/F	45 FISHBED J/K/L 4 MONGOL B
Milovice	12 FISHBED H	16 FISHBED H 4 MONGOL A	45 FLOGGER B 5 FLOGGER C
<u>SAF HUNGARY</u>			
Sarmellek	37 FISHBED D/F	42 FISHBED D/F	45 FLOGGER B 10 FLOGGER C
Budapest/Tokol	37 FISHBED D/F	14 FISHBED D/F 12 FISHBED J	45 FISHBED J/K/L 4 MONGOL B
Kiskunlachaza	37 FISHBED D/F	40 FISHBED J 2 MONGOL	45 FISHBED J/K/L 4 MONGOL B

25X1

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## APPENDIX B

Ground Attack Force Upgrading 

25X1

<u>AIRFIELD</u>	<u>MID-1970</u>	<u>MID-1973</u>	<u>MID-1977</u>
<u>SAF GDR</u>			
Brand	37 FRESCO A/B/C	48 FRESCO 8 MIDGET	42 FITTER A 8 MOUJIK
Grossenhain	37 FITTER A	48 FITTER A 6 MOUJIK	45 FITTER C/D 4 FITTER E
Finsterwalde	40 FITTER A	48 FITTER A 6 MOUJIK	45 FLOGGER D 9 FLOGGER C
Mirow	48 FITTER A	48 FITTER A 4 MOUJIK	45 FLOGGER D 6 FLOGGER C
Templin 1	25 FISHBED D/F 12 FISHBED J	48 FITTER A 4 MOUJIK	42 FITTER C/D 6 MOUJIK
Neuruppin	37 FRESCO	48 FRESCO	45 FISHBED J/K/L 4 MONGOL B
<u>SAF POLAND</u>			
Osla	37 FITTER A	40 FITTER A 2 MOUJIK	42 FLOGGER D 8 FLOGGER C
Szprotawa	37 FRESCO	40 FRESCO	42 FITTER C 4 MOUJIK
Zagan	37 FRESCO	40 FRESCO	42 FISHBED D/F 4 MONGOL B
<u>SAF HUNGARY</u>			
Kunmadaras	37 FITTER A	40 FITTER A	42 FITTER C/D
Debrecen	12 BREWER 52 BEAGLE	12 BREWER 52 BEAGLE	32 BREWER B/C 8 BREWER E 3 MAESTRO

25X1

## SECRET

## APPENDIX C

Reconnaissance Force Upgrading 

25X1

<u>AIRFIELD</u>	<u>MID-1970</u>	<u>MID-1973</u>	<u>MID-1977</u>
<u>SAF GDR</u>			
Wernauchen	32 MANGROVE	42 MANGROVE	15 FOXBAT B/D 4 FOXBAT C 14 BREWER D 4 MAESTRO
Welzow	32 BREWER D	30 BREWER D 12 BREWER E 2 BEAGLE (ECM)	12 BREWER D 12 BREWER E
Allstedt	37 FISHBED H	42 FISHBED H 4 MONGOL A	42 FISHBED H 4 MONGOL A
<u>SAF POLAND</u>			
Brzeg	25 MANGROVE 15 BREWER D 16 FISHBED H	10 BREWER E 23 BREWER D 5 MANGROVE 3 BEAGLE (ECM) 24 FISHBED H	15 FOXBAT B/D 2 FOXBAT C 12 BREWER D 3 MAESTRO 12 FISHBED H 2 MONGOL A
<u>SAF CZECHOSLOVAKIA</u>			
Sliac	37 FISHBED D/F	40 FISHBED D/F	16 FISHBED H 4 MONGOL A
<u>SAF HUNGARY</u>			
Kunmadaras	16 FISHBED H	16 FISHBED H	16 FISHBED H

25X1

DISTRIBUTION LISTDOD AND JOINT AGENCIES

A009 OASD ATOM ENERGY  
 A010 AFS COL  
 A024 DEF NUCLEAR AGCY  
 A085 NAT DEF UNIVERSITY  
 A104 OASD (I)/DDI  
 A115 OASD ISA  
 A117 OSD (ODP+E)  
 A210 DMAAC  
 A300 JCS  
 A315 JCS/SAGA  
 A325 JCS/J-3  
 A353 JSTPS  
 A364 USR+DCOORD SHAPE  
 A048 DEF CIV PREP AGCY  
 A137 OASD ISA/MBFR-PP  
 A142 OASD (DDR&E)AD(TST&E)

DIA

B040 DIA/DIO  
 B055 DIA/DT-4B  
 B080 DIA/SWS  
 B132 DIA/DE-1  
 B134 DIA/DE-2  
 B162 DIA/DT-1A2  
 B167 DIA/DT-2B  
 B364 DIA/DB-1B3 (2)  
 B545 DIA/VP  
 B573 DIA/DB-4E1  
 B579 DIA/DN-2B2  
 B580 DIA/DB-1B6  
 B583 DIA/DB-1D (10)  
 B593 DIA/DB-1G2  
 B594 DIA/DB-1F (2)  
 B597 DIA/DB-1G1  
 B615 DIA/DN-2C  
 B633 DIA/DB-4G3  
 B722 DIA/DB-5B  
 B731 DIA/DB-5F  
 B737 DIA/RDS-3B3 (LIB) (5)  
 B825 DIA/DB-4C3

DIA (CONT'D)

B871 USDAO CZECHOSLOVAKIA  
 B886 USDAO HUNGARY  
 B917 USDAO POLAND  
 B934 USDAO USSR

APMY

C020 DCS-MIL OPS  
 C021 DCS-LOG  
 C090 USAMSSA  
 C204 TCATA  
 C309 500TH MIG  
 C428 OP TEST+EVAL AGCY  
 C454 FLD ARTY SCH  
 C459 COMD-GEN STF COL  
 C461 INFANTRY SCH  
 C463 INTEL CTR+SCH  
 C470 ARMY WAR COL  
 C500 TRADOC (6)  
 C510 AIR MOBILITY R+D LAB  
 C234 1ST CAV DIV  
 C532 MEW ELCT WAR LAB  
 C535 AVIATION SYS COMD  
 C538 WHITE SANDS MSL RG  
 C539 TRASANA  
 C547 ARMY NUCLEAR AGCY  
 C550 ELECTRONICS COMD  
 C557 USAIIC  
 C567 AIR DEF CEN  
 C569 MOB EQPT R+D CMD  
 C591 FSTC (3)  
 C619 MIA REDSTONE  
 C620 SRD/ITAD  
 C635 AIR DEF AGCY  
 C639 CMBT+TNG DEV DIR  
 C641 AVIATION SCHOOL  
 C646 CMBARMSMBTDEVACTY  
 C715 ARMOR CTR  
 C763 OACSI-S + T DIV  
 C766 OACSI-INT SUP DET  
 C766 OACSI-USAITAD

DL-1

ARMY (CONT'D)

C788 OACSI-SOV/EEUR BR  
 C305 18TH ABN CORPS  
 C307 24TH INF DIV  
 C417 7TH INF DIV

NAVY

D002 OP-96 (DNM)  
 D008 NISC (2)  
 D033 STRATANALSUPPGRU  
 D039 FOURTH MAW/MARTC  
 D080 OP-96N  
 D043 NAVFITWEPSCOL  
 D047 CP-37  
 D150 CMC (INT) (3)  
 D159 NAVAIRDEVCE  
 D217 NAVWPNCEN  
 D218 NRL WASH DC  
 D220 ONR  
 D246 NAVSURFWPNCEN DAHL  
 D248 NAVSEASYSKOM  
 D249 NAVPGSCOL  
 D256 NAVSHIPWPSYSENGSTA  
 D258 DTNSRDC  
 D261 NUSC NPT  
 D263 NOSC (RES LIB)  
 D275 OP-951D2  
 D280 OP-098D  
 D320 NSGA FILL  
 D361 FLEMINWARTRACEN  
 D433 FLEASHWARACENLANT  
 D491 NAVLIAISONU MUNICH  
 D506 NOSC (CODE 121A/B)  
 D507 COMINNEWARCOM  
 D510 CHNAVMAT (MAT-091)  
 D511 NAVAIRSYSKOM  
 D561 NWEPEVL FAC KIRTLND  
 D700 CGMCDCEC (2)  
 D900 NFOIO  
 D941 OP-955D  
 D247 NAVSURFWPNCEN WOAK  
 D971 009F  
 D972 009BIP  
 D766 NAVCOASTSYSLAB

NAVY CONT'D

D447 NLONLAB NUSC

AIR FORCE

E010 AFIS/INDOC  
 E016 AFIS/INC (2)  
 E017 AF/RDQA-W  
 E018 AF/RDQA-C  
 E020 AFIS/INZA  
 E046 7602 AINTELG/INOAA  
 E053 AF/INAKA  
 E054 AF/INAKB  
 E100 TAC (9TH TIS/LDD) (10)  
 E200 AAC  
 E293 AF/XOODE  
 E303 AF/INAP  
 E317 AF/SAMI  
 E321 AF/XOXXX  
 E323 AF/XOXXW  
 E326 AF/XOXXP  
 E408 AFWL  
 E411 ASD/FTD/ETID  
 E420 FTD/NICD  
 E429 SAMSO (IND)  
 E437 AFIS/INI  
 E451 AUL/LSE

U & S COMMANDS

F005 CINCMAC  
 G005 CINCAD  
 H005 USCINCEUR  
 H006 USEUCOM DEFANALCTR  
 H010 SOTFC (J-3)  
 H101 USAF 497RTG (IRC) (10)  
 H300 USAICE (USAREUR)  
 H306 DCSI US COM BERLIN  
 H500 CINCUSNAVEUR  
 H511 COMSIXTHFLT  
 H525 HQ VII CORPS  
 H530 HQ 1ST ARMORED DIV  
 H526 HQ 3RD INF DIV (FWD)

U & S COMMANDS

H527 HQ 8TH INF DIV  
 H528 1ST INF DIV (FWD)  
 H529 HQ 3RD ARMORED DIV

J005 CINCLANT  
 J515 FICEURLANT  
 J517 COMNAVSURFLANT  
 J575 FMFLANT/FMFEUR  
 J579 4TH MAB  
 J593 COMOPTEVFOR  
 J650 AIRTEVRON 1  
 J977 FLTCOMBATDIRSSACT  
 J818 SECONDMARDIV  
 J993 SECONDMAW

K005 CINCPAC  
 K007 COMUSJAPAN  
 K100 PACAF 548 PTG  
 K115 5TH AF  
 K152 FOURTHMARDIV  
 K300 IPAC (CODE IC-L)  
 K304 USATSA-J  
 K305 25TH INF DIV  
 K314 IPAC (CODE I-23)  
 K315 IPAC (CODE I-24)  
 K340 I CORPS (ROK/US)GP  
 K514 COMTHIRDFLT  
 K516 FIRST MAF  
 K601 FIRSTMAW  
 K603 THIRDMAW  
 K605 FMFPAC  
 K612 THIRDMARDIV  
 K650 COMNAVSURFPAC  
 K658 COMUSNAVPHIL  
 K679 FLTCORGRU 1  
 K408 COMLANTWINGPAC (42B2)

L005 CINCSAC  
 L040 SAC 544TH ARTW

N005 USREDCOM

OTHER

P055 CIA/CRS/ADD/SD (14)

OTHER

P085 STATE (5)  
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ROOM NO.	BUILDING	
7E-15	Hqts.	
REMARKS:		
Please forward to		
STAT		
<div style="border: 1px solid black; height: 40px; width: 100%;"></div>		
IC Staff		
<div style="border: 1px solid black; height: 60px; width: 100%;"></div>		
FROM: OCP/CLD/DSB		STAT
ROOM NO.	BUILDING	
LH 129	Hqts.	
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1 FEB 55		
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9-10-77

**TO**

FROM

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IC 100/1001

OCK/CCLD/DSL

**№ 357819**

1-A-1129 HGS.

10/10/1988

ITEM NO.

DESCRIPTION
1. The first step in the process of identifying a problem is to recognize that a problem exists. This is often done by comparing current performance with a desired state or goal.
2. Once a problem is recognized, the next step is to define the problem more precisely. This involves identifying the specific aspects of the problem that need to be addressed.
3. The third step is to analyze the problem. This involves gathering information about the problem and its causes, and identifying the factors that are contributing to the problem.
4. The fourth step is to develop a solution. This involves brainstorming possible solutions and evaluating them based on their feasibility and effectiveness.
5. The fifth step is to implement the solution. This involves putting the chosen solution into action and monitoring its progress.
6. The final step is to evaluate the results. This involves comparing the actual results with the desired state and determining whether the problem has been solved.

REMARKS

1	DIA/DDT	1300-94-97-52
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Kevin Connors

2 DT/DT/ 1300-99-77

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10

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ACTION		DISPATCH	PREPARE REPLY
APPROVAL		FILE	RECOMMENDATION
COMMENT		INFORMATION	RETURN
CONCURRENCE		SIGNATURE	
REMARKS:			
FROM: NAME, ADDRESS, AND PHONE NO.			
OPEI CLD DSB			DATE
1-H-1129 dgt.			9 Nov 77

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